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58



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,512	08/18/2000	Daisuke Tsukahara	1163-0286P	7943

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EXAMINER

ARANI, TAGHI T

ART UNIT PAPER NUMBER

2131

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

58

Office Action Summary

Application No.

09/641,512

Applicant(s)

TSUKAHARA ET AL.

Examiner

Taghi T. Arani, Ph.D.

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-8,10,11 and 14-19 is/are rejected.
- 7) ☒ Claim(s) 2-3, 9, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-19 are pending for examination.

Claim 20 is cancelled.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 6, 10-11 and 14-19 are rejected under 35 U.S.C. 102(a and e) as being anticipated by prior art of record, U.S. Patent No. 6,157,719 to Wasilewski et al .

As per claim 1, Wasilewski et al. teach a conditional access system comprising:
a demultiplexer for demultiplexing a packet stream transmitted
from a transmitting site into encrypted coded media data, an ECM
(Entitlement Control Message) and an EMM (Entitlement Management
Message) [Figures 1 and 2B];

an EMM decryption section for retrieving work keys[column 4, lines 56-58 and lines

Art Unit: 2131

64-66] and partial viewing authorization information from the EMM extracted by said demultiplexer [figure 22, FREE PREVIEW 2219];

an ECM decryption section for decrypting the ECM using the work keys[[,]] and for intermittently retrieving scrambling keys from the ECM [column 4, lines 50-54], when the partial viewing authorization information retrieved by said EMM decryption section permits partial viewing;

a media descrambling section for intermittently descrambling the coded media data using the scrambling keys intermittently retrieved by said ECM decryption section [col. 7, lines 12-15] ; and

a decoding section for decoding the coded media data intermittently descrambled by said media data descrambling section [col. 7, lines 20-24].

As per claim 4, Wasilewski et al. teach a conditional access system comprising:

a demultiplexer for demultiplexin a packet stream transmitted from a transmitting site into encrypted coded media data, an ECM (Entitlement Control Message) and an EMM (Entitlement Management Message) [Figures 1 and 2B];

an EMM decryption section for retrieving work keys and partial viewing authorization information from the EMM extracted by said demultiplexer [column 4, lines 56-58 and lines 64-66, Figure 22, FREE PREVIEW 2219] ;

an ECM decryption section for decrypting the ECM using the work keys retrieved by said EMM decryption section and for retrieving scrambling keys from the ECM [col. 7, lines 12-15] ;

a media descrambling section for intermittently descrambling the coded media data using the scrambling keys when the partial viewing authorization retrieved by said EMM decryption section permits partial viewing; and a decoding section for decoding the coded media data intermittently descrambled by said media data descrambling section [col. 7, lines 20-24].

As per claim 6, A conditional access system comprising:

a demultiplexer for demultiplexing a packet stream transmitted from a transmitting site into encrypted coded media data, an ECM (Entitlement Control Message) and an EMM (Entitlement Management Message) [Figures 1 and 2B];

an EMM decryption section for retrieving work keys and partial viewing authorization information from the EMM extracted by said demultiplexer [column 4, lines 56-58 and lines 64-66, Figure 22, FREE PREVIEW 2219];

an ECM decryption section for decrypting the ECM using the work keys retrieved by said EMM decryption section and for retrieving scrambling keys from the ECM [col. 7, lines 12-15];

a media descrambling section for descrambling the coded media data using the scrambling keys retrieved by said ECM decryption section (Figure 1 Decryptor and CW]; and

a decoding section for intermittently decoding the coded media data descrambled by said media data descrambling section when the partial viewing authorization information retrieved by said EMM decryption section permits partial viewing [col. 7, lines 20-24, see also Figure 22 element 2209].

As per claim 10, Wasilewski et al. as modified teach a conditional access system comprising:

Art Unit: 2131

a demultiplexer for demultiplexing a packet stream transmitted from a transmitting site into encrypted coded

media data, an ECM (Entitlement Control Message) and an EMM (Entitlement Management Message) [Figures 1 and 2B];

an EMM decryption section for retrieving partial viewing authorization information from the EMM

extracted by said demultiplexer, said EMM decryption section intermittently retrieving work keys from the EMM when the partial viewing authorization information permits partial viewing [column 4, lines 56-58 and lines 64-66, Figure 22, FREE PREVIEW 2219];

an ECM decryption section for intermittently decrypting the ECM using the work keys intermittently retrieved by said EMM decryption section and for intermittently retrieving scrambling keys from the ECM[col. 7, lines 12-15];

a media descrambling section for intermittently descrambling the coded media data using the scrambling keys intermittently retrieved by said ECM decryption section(Figure 1 Decryptor and CW]; and

a decoding section for decoding the coded media data intermittently descrambled by said media data descrambling section[col. 7, lines 20-24, see also Figure 22 element 2209].

As per claim 11, Wasilewski et al. teach the conditional access system according to claim 10, wherein said EMM decryption section retrieves only part of the work keys included in the EMM [figure 2B, DECRYPT 234].

As per claim 14, Wasilewski et al. teach the conditional access system according to claim 1, wherein the partial viewing authorization information includes a control parameter indicating a partially authorized viewable range [figures 26 and 27].

As per claim 15, Wasilewski et al. teach the conditional access system according to claim 1, wherein the partial viewing authorization information consists of information authorizing viewing only for a specific time period [column 37, lines 18-21].

As per claim 16, Wasilewski et al. teach the conditional access system according to claim 1, wherein a subscriber contract information that includes information authorizing partial viewing is used as the partial viewing authorization information [col. 36, line 63 – col. 37, line 1].

As per claim 17, Wasilewski et al. teach The conditional access system according to claim 1, wherein the EMM is used for inserting the work keys which are used only for specific time periods[column 4, lines 62-63].

As per claim 18, Wasilewski et al. teach the conditional access system according to claim 1, wherein said demultiplexer and said decoding section are based on the MPEG-2 standard. [figure 2A].

As per claim 19, Wasilewski et al. teach the conditional access system according to claim 1, wherein when a plurality of programs are multiplexed into the packet stream transmitted from the transmitting site, authorization, partial authorization and inhibition of viewing the programs are determined for individual programs-independently[column 2, lines 13-15].

Art Unit: 2131

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Wasilewski et al. as applied to claims 1, 4, 10 and 6 above and further in view of prior art of revord, GB 2297017 to Andrew et al.

As per claim 5, Wasilewski et al. do not explicitly teach wherein, media data descrambling-section handles part of the coded media data which is not descrambled as unencrypted data.

However, Wasilewski et al. teach a Secure element (DHCTSE 627 of figure 6) interprets the ECMs and EMMs and decrypts the portion of the service that is authorized [column 15, line 60-61]. The DHCTSE also includes a tamper-proof memory that only DHCTSE can access [column 16, lines 1-3]. In the ECMs, a flag is set if a free preview is permitted and only a portion of the service is descrambled, so the still scrambled portion of the service could be stored in DHCTSE's memory.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the memory included in the DHCTSE to handle the portion of the media data that was not descrambled. One would have been motivated to use Wasilewski et al. as such to provide for a storage device for the services that were not subscribed to thus not descrambled.

As per claim 7, Wasilewski et al. do not teach a conditional access system according to

Art Unit: 2131

, wherein said decoding section decodes only part of frames in a frame sequence constituting the coded media data.

However, Andrew et al. disclose a decoding processor for decoding only part of frames in a frame sequence constituting the coded media data in response to the decoding control information when the subscriber contract information inhibits viewing and the partial viewing authorization information permits partial viewing.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Andrew et al.'s teaching of decoding only part of frames in a frame sequence to the system and method of Wasilewski et al., such that SD MODULE 625 of figure 6 of Wasilewski et al. would perform partial decryption of a frame sequence. One would have been motivated to modify Wasilewski et al.'s system as such in order to reduce the amount of decryption that needs to be performed thus significantly reducing processor usage.

As per claim 8, Wasilewski et al. as modified teach a conditional access system according to claim 7, wherein said decoding section decodes only I frames [page 7, lines 14-20 of Andrew et al.].

Allowable Subject Matter

Claims 2-3, 9, 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment

Applicant's arguments filed 5/19/204 regarding the rejection of the claims 1-20 under 35 U.S.C. 102 () and 103() have been fully considered but they are not persuasive. Applicant's attempt to distinguish the claims from prior art is based on noting the lack of a teaching of the partial viewing authorization retrieved by the EMM decryption section (which) permits partial viewing.

The Examiner disagrees. Wasilewski et al. teach a Free Preview 2219 flag that indicates that the ECM is accompanying a portion of the service instance (i.e. partial viewing) that is a free preview.

The Applicant argues that the Action appears to try to equate a free preview with partial viewing authorization, but Applicants strongly contend there is a significant difference between a free preview (essentially a program in itself) versus partial viewing authorization.

The Examiner responds that Free Preview of Wasilewski et al., being a portion of the service instance, by reasonable broad interpretation, would constitute recited partial viewing authorization.

Action is Final

THIS ACTION IS FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2131

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from examiner should be directed to Taghi Arani, whose telephone number is (703) 305-4274. The examiner can normally be reached Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh, can be reached at (703) 305-9648. The Fax numbers for the organization where this application is assigned is:

(703) 872-9306

Taghi Arani

Patent Examiner

E. L. Moise
EMMANUELL L. MOISE
PRIMARY EXAMINER
4/11/2136